SEQUENCE LISTING

<110> VLAAMS INTERUNIVERSITAIR INSTITUUT VOOR BIOTECHNOL

<120> Nucleic Acid Binding of Multi Zinc Finger Transcription Factors

<130> 2676 5174US

<140> US/10/028,396
<141> 2001-12-21

<150> 99202068.5
<151> 1999-06-25

<150> PCT/EP00/05582
<151> 2000-06-09

<160> 66

<170> PatentIn version 3.1

<210> 1
<211> 5
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: Portion of bait for screening

<400> 1
cacct   5

<210> 2
<211> 6
<212> DNA
<213> Artificial

<220>
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<223> Description of Artificial Sequence: portion of bait for screening

<400> 2
cacctg   6

<210> 3
<211> 5
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: portion of bait for screening

<400> 3
aggtg   5

<210> 4
<211> 7
<212> DNA
<213> Artificial

<220>

1

<221> misc_feature
<223> Description of Artificial Sequence: consensus element for binding
      of MyT1, NZF 1 and NZF 3

<400> 4
aaagttt   7

<210> 5
<211> 52
<212> DNA
<213> Artificial

<220>
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<223> Description of Artificial Sequence: complex consensus sequence

<220>
<221> misc_feature
<222> (16)..(43)
<223> nucleotides 16 43 represent a spacer sequence wherein any one, more,

      or all of nucleotides 16 43 my be present or absent

<400> 5
gacaagataa gataannnnn nnnnnnnnnn nnnnnnnnnn nnnctcatct tc   52

<210> 6
<211> 30
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: primer SIP1 NZF3Mut

<400> 6
ccacctgaaa gaatccctga gaattcacag   30

<210> 7
<211> 30
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: primer SIP1 CZF2Mut

<400> 7
gggtcctaca gttcatctat cagcagcaag   30

<210> 8
<211> 30
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: primer SIP1 NZF4Mut

<400> 8
caccacctta tcgagtcctc gaggctgcac   30

<210> 9
<211> 30
<212> DNA
<213> Artificial

<220>
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<223> Description of Artificial Sequence: primer SIP1 CZF3Mut

<400> 9
tcctactcgc agtccatgaa tcacaggtac   30

<210> 10
<211> 50
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Xbra WT

<400> 10
atccaggcca cctaaaatat agaatgataa agtgaccagg tgtcagttct   50

<210> 11
<211> 50
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Xbra D

<400> 11
atccaggcca cctaaaatat agaatgataa agtgaccaga tgtcagttct   50

<210> 12
<211> 23
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Xbra E

<400> 12
taaagtgacc aggtgtcagt tct   23

<210> 13
<211> 27
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Xbra F

<400> 13
atccaggcca cctaaaatat agaatga   27

3

<210> 14
<211> 50
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Rdm + Xbra E

<400> 14
caatttagag tactgtgtac ttgggagtaa agtgaccagg tgtcagttct   50

<210> 15
<211> 53
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Xbra F + AREB6

<400> 15
atccaggcca cctaaaatat agaatgaggc tcagacaggt gtagaattcg gcg   53

<210> 16
<211> 53
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Rdm + AREB6

<400> 16
caatttagag tactgtgtac ttgggagggc tcagacaggt gtagaattcg gcg   53

<210> 17
<211> 50
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Xbra J

<400> 17
gcacaggcca cctaaaatat agaatgataa agtgaccagg tgtcagttct   50

<210> 18
<211> 50
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Xbra K

<400> 18
atcactgcca cctaaaatat agaatgataa agtgaccagg tgtcagttct   50

<210> 19

4

<211> 50
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Xbra L

<400> 19
atccagtaaa cctaaaatat agaatgataa agtgaccagg tgtcagttct   50

<210> 20
<211> 50
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Xbra M

<400> 20
atccaggccc aataaaatat agaatgataa agtgaccagg tgtcagttct   50

<210> 21
<211> 50
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Xbra N

<400> 21
atccaggcca ccgccaatat agaatgataa agtgaccagg tgtcagttct   50

<210> 22
<211> 50
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Xbra O

<400> 22
atccaggcca cctaaccgat agaatgataa agtgaccagg tgtcagttct   50

<210> 23
<211> 50
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Xbra P

<400> 23
atccaggcca cctaaaatcg cgaatgataa agtgaccagg tgtcagttct   50

<210> 24
<211> 50
<212> DNA
<213> Artificial

5

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Xbra Q

<400> 24
atccaggcca cctaaaatat atcctgataa agtgaccagg tgtcagttct   50

<210> 25
<211> 50
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Xbra R

<400> 25
atccaggcca cctaaaatat agaagtctaa agtgaccagg tgtcagttct   50

<210> 26
<211> 50
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Xbra S

<400> 26
atccaggcca tctaaaatat agaatgataa agtgaccagg tgtcagttct   50

<210> 27
<211> 50
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Xbra Z

<400> 27
atccaggcca cctaaaatat agaatgataa agtgactagg tgtcagttct   50

<210> 28
<211> 47
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Xbra B

<400> 28
atccaggcca cctatataga atgataaagt gaccaggtgt cagttct   47

<210> 29
<211> 47
<212> DNA

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Xbra C

<400> 29
atccaggcca cctaaaatat agaatgatgt gaccaggtgt cagttct   47

<210> 30
<211> 40
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Xbra U

<400> 30
atccaggcca cctaaaatat agtgaccagg tgtcagttct   40

<210> 31
<211> 46
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Xbra EE

<400> 31
taaagtgacc aggtgtcagt tcttaaagtg accaggtgtc agttct   46

<210> 32
<211> 46
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Xbra ErE

<400> 32
agaactgaca cctggtcact ttataaagtg accaggtgtc agttct   46

<210> 33
<211> 50
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Xbra FrF

<400> 33
atccaggcca cctaaaatat agaatattct atattttagg tggcctggat   50

<210> 34
<211> 50
<212> DNA
<213> Artificial

<220>

7

<221> misc_feature
<223> Description of Artificial Sequence: probe Xbra V

<400> 34
atccaggcag gtgtaaatat agaatgataa agtgacccac ctacagttct   50

<210> 35
<211> 50
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Xbra W

<400> 35
atccaggcag gtgtaaatat agaatgataa agtgaccagg tgtcagttct   50

<210> 36
<211> 60
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe alfa 4I WT (alfa 4
integrin)

<400> 36
gcagggcaca cctggattgc attagaatga gactcactac ccagttcagg tgtgttgcgt   60

<210> 37
<211> 60
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe alfa 4I A (alfa 4
integrin)

<400> 37
gcagggcaca cctggattgc attagaatga gactcactac ccagttcaga tgtgttgcgt   60

<210> 38
<211> 60
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe alfa4 I B (alfa 4
integrin)

<400> 38
gcagggcaca tctggattgc attagaatga gactcactac ccagttcagg tgtgttgcgt   60

<210> 39
<211> 70

<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Ecad WT

<400> 39
tggccggcag gtgaaccctc agccaatcag cggtacgggg ggcggtgctc cggggctcac   60

ctggctgcag   70

<210> 40
<211> 70
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Ecad A

<400> 40
tggccggcag gtgaaccctc agccaatcag cggtacgggg ggcggtgctc cggggctcat   60

ctggctgcag   70

<210> 41
<211> 70
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: probe Ecad B

<400> 41
tggccggcag atgaaccctc agccaatcag cggtacgggg ggcggtgctc cggggctcac   60

ctggctgcag   70

<210> 42
<211> 21
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: PCR primer for E cadherin
promoter
        sequence (341/+41)

<400> 42
acaaaagaac tcagccaagt g   21

<210> 43
<211> 18
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: PCR primer for E cadherin
promoter
        sequence (341/+41)

9

<400> 43
ccgcaagctc acaggtgc   18

<210> 44
<211> 26
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: forward primer E box1

<400> 44
gctgtggccg gcagatgaac cctcag   26

<210> 45
<211> 26
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: reverse primer E box1

<400> 45
ctgagggttc atctgccggc cacagc   26

<210> 46
<211> 24
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: forward primer E box3

<400> 46
gctccgggct catctggctg cagc   24

<210> 47
<211> 25
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: reverse primer E box3

<400> 47
gctgcagcca gatgagcccc ggagc   25

<210> 48
<211> 27
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: degenerated primer

<220>
<221> misc_feature
<222> (25)

<223> n is a spacer and may be any nucleotide

<400> 48
cttccagcag ccctacgayc argcnca   27

<210> 49
<211> 28
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: degenerated primer

<220>
<221> misc_feature
<222> (26)
<223> n is a spacer and may be any nucleotide

<400> 49
gggtgtggga ccggatrtgc atyttnat   28

<210> 50
<211> 29
<212> PRT
<213> Artificial

<220>
<223> SIP1nzf1

<400> 50

Gln Leu Leu Thr Cys Pro Tyr Cys Asp Arg Gly Tyr Lys Arg Leu Thr
1   5   10   15

Ser Leu Lys Glu His Ile Lys Tyr Arg His Lys Asn Glu
            20   25

<210> 51
<211> 29
<212> PRT
<213> Artificial

<220>
<223> sigma-EF1nzf1

<400> 51

Gln Leu Leu Thr Cys Pro Tyr Cys Asp Arg Gly Tyr Lys Arg Phe Thr
1   5   10   15

Ser Leu Lys Glu His Ile Lys Tyr Arg His Lys Asn Glu
            20   25

<210> 52
<211> 28
<212> PRT
<213> Artificial

<220>
<223> SIP1nzf2

<400> 52

Glu Asn Phe Ser Cys Pro Leu Cys Ser Tyr Thr Phe Ala Tyr Arg Thr
1   5   10   15

Gln Leu Glu Arg His Met Val Thr His Lys Pro Gly
                20   25

<210> 53
<211> 28
<212> PRT
<213> Artificial

<220>
<223> sigma-EF1nzf2

<400> 53

Glu Asn Phe Ser Cys Ser Leu Cys Ser Tyr Thr Phe Ala Tyr Arg Thr
1   5   10   15

Gln Leu Glu Arg His Met Thr Ser His Lys Ser Gly
                20   25

<210> 54
<211> 28
<212> PRT
<213> Artificial

<220>
<223> SIP1nzf3 and sigma-EF1nzf3

<400> 54

Arg Lys Phe Lys Cys Thr Glu Cys Gly Lys Ala Phe Lys Tyr Lys His
1   5   10   15

His Leu Lys Glu His Leu Arg Ile His Ser Gly Glu
                20   25

<210> 55
<211> 28
<212> PRT
<213> Artificial

<220>
<223> SIP1nzf4 and sigma-EF1nzf4

<400> 55

12

Lys Pro Tyr Glu Cys Pro Asn Cys Lys Lys Arg Phe Ser His Ser Gly
1   5   10   15

Ser Tyr Ser Ser His Ile Ser Ser Lys Lys Cys Ile
                20   25

<210>   56
<211>   28
<212>   PRT
<213>   Artificial

<220>
<223>   SIP1czf1

<400>   56

Gly Met Tyr Ala Cys Asp Leu Cys Asp Lys Thr Phe Gln Lys Ser Ser
1   5   10   15

Ser Leu Leu Arg His Lys Tyr Glu His Thr Gly Lys
                20   25

<210>   57
<211>   28
<212>   PRT
<213>   Artificial

<220>
<223>   sigma-EF1czf1

<400>   57

Gly Met Tyr Ala Cys Asp Leu Cys Asp Lys Ile Phe Gln Lys Ser Ser
1   5   10   15

Ser Leu Leu Arg His Lys Tyr Glu His Thr Gly Lys
                20   25

<210>   58
<211>   28
<212>   PRT
<213>   Artificial

<220>
<223>   SIP1czf2

<400>   58

Arg Pro His Gln Cys Gln Ile Cys Lys Lys Ala Phe Lys His Lys His
1   5   10   15

His Leu Ile Glu His Ser Arg Leu His Ser Gly Glu
                20   25

<210>   59
<211>   28

13

<212> PRT
<213> Artificial

<220>
<223> sigma-EF1czf2

<400> 59

Arg Pro His Gln Cys Gly Ile Cys Arg Lys Ala Phe Lys His Lys His
1   5   10   15

His Leu Ile Glu His Met Arg Leu His Ser Gly Glu
                20   25

<210> 60
<211> 28
<212> PRT
<213> Artificial

<220>
<223> SIP1czf3 and sigma-EF1czf3

<400> 60

Glu Lys Pro Tyr Cys Asp Lys Cys Gly Lys Arg Phe Ser His Ser Gly
1   5   10   15

Ser Tyr Ser Gln His Met Asn His Arg Tyr Ser Tyr
                20   25

<210> 61
<211> 52
<212> PRT
<213> Artificial

<220>
<223> SIP1nzf3+nzf4

<400> 61

Cys Thr Glu Cys Gly Lys Ala Phe Lys Tyr Lys His His Leu Lys Glu
1   5   10   15

His Leu Arg Ile His Ser Gly Glu Lys Pro Tyr Glu Cys Pro Asn Cys
                20   25   30

Lys Lys Arg Phe Ser His Ser Gly Ser Tyr Ser Ser His Ile Ser Ser
            35   40   45

Lys Lys Cys Ile
            50

<210> 62
<211> 54
<212> PRT
<213> Artificial

14

<220>
<223> SIP1czf2+czf3

<400> 62

Cys Gln Ile Cys Lys Lys Ala Phe Lys His Lys His His Leu Ile Glu
1   5   10   15

His Ser Arg Leu His Ser Gly Glu Lys Pro Tyr Gln Cys Asp Lys Cys
            20   25   30

Gly Lys Arg Phe Ser His Ser Gly Ser Tyr Ser Gln His Met Asn His
            35   40   45

Arg Tyr Ser Tyr Cys Lys
            50

<210> 63
<211> 52
<212> PRT
<213> Artificial

<220>
<223> sigma-EF1nzf3+nzf4

<400> 63

Cys Thr Glu Cys Gly Lys Ala Phe Lys Tyr Lys His His Leu Lys Glu
1   5   10   15

His Leu Arg Ile His Ser Gly Glu Lys Pro Tyr Glu Cys Pro Asn Cys
            20   25   30

Lys Lys Arg Phe Ser His Ser Gly Ser Tyr Ser Ser His Ile Ser Ser
            35   40   45

Lys Lys Cys Ile
        50

<210> 64
<211> 54
<212> PRT
<213> Artificial

<220>
<223> sigma-EF1czf2+czf3

<400> 64

Cys Gly Ile Cys Lys Lys Ala Phe Lys His Lys His His Leu Ile Glu
1   5   10   15

His Met Arg Leu His Ser Gly Glu Lys Pro Tyr Gln Cys Asp Lys Cys
            20   25   30

15

Gly Lys Arg Phe Ser His Ser Gly Ser Tyr Ser Gln His Met Asn His
      35   40   45

Arg Tyr Ser Tyr Cys Lys
      50

<210> 65
<211> 14
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: a class of zinc finger

<220>
<221> misc_feature
<222> (2)...(3), (5)...(8), (10)...(13)
<223> n is a spacer and may be any nucleotide

<400> 65
cnncnnnnhn nnnc   14

<210> 66
<211> 25
<212> DNA
<213> Artificial

<220>
<221> misc_feature
<223> Description of Artificial Sequence: a class of zinc finger

<220>
<221> misc_feature
<222> (2)...(6), (8)...(19), (21)...(24)
<223> n is a spacer and may be any nucleotide

<400> 66
cnnnnncnnn nnnnnnnnnh nnnnc   25